XP-002079250

1/1 - (C) WPI / DERWENT
AN - 89-325039 ç45!
AP - DD880312703 880208
PR - DD880312703 880208
TI - Prepn. of microporous active carbon from lignite coke - by activation in atmos. contg. steam and carbon di:oxide, limiting heat supply
IW - PREPARATION MICROPOROUS ACTIVE CARBON LIGNITE COKE ACTIVATE ATMOSPHERE CONTAIN STEAM CARBON DI OXIDE LIMIT HEAT SUPPLY
IN - HESCHEL W; KLOSE E; KRAFT M; MOBIUS R; SPINDLER H; SZARGAN P
PA - (VELW) VEB LEUNA-WERKE ULBRICHT W
PN - DD268677 A 890607 DW8945 005pp
ORD - 1989-06-07
IC - C01B31/10
FS - CPI
DC - E36 J01
AB - DD-268677 Microporous active C is prepd. from lignite coke by partial gasification in a medium contg. H2O/CO2, activation at 980-1200 K, in absence of O2, batchwise or in a reactor with a narrow range of residence time, and addn. of reaction heat of 100-800 kJ/kg C. The activated C is cooled, opt. extd., washed with water, and dried.
- Pref. the raw material is lignite low temp. coke (BTT coke) from carbonisation involving gas recirculation; the gas used for activation is obtd. by combustion of gases contg. hydrocarbons in air at gamma less than 1, in a pre-inserted combustion chamber; and the amt. of reducing gases CO and H2 is above 5%.
- USE/ADVANTAGE - The C has 35-45% porosity, with half of the pores having dia. 0.4-0.7 nm, the rest being transport pores with dia. above 20 nm. The mesopores form less than 10% of the total pore vol. The sepn. properties are similar to those of molecular sieves. The active C is used for purificn. and sepn. of gases.(0/0)